

DOCUMENT RESUME

ED 198 098

SP 017 333

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TITLE Mental Flexibility and Underlying Personality
Predispositions of Graduate Students in Education.
PUB DATE [74]
NOTE 13p.
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Educational Quality; *Education Majors; Enrollment
Trends; *Graduate Students; Graduate Study;
*Heterogeneous Grouping; Higher Education; Program
Improvement; *School Demography; Student Attitudes;
Student Characteristics; *Teacher Attitudes; Teacher
Education Programs

ABSTRACT

Graduate faculties are very receptive to the idea of their own talented undergraduates choosing to matriculate in the same institution's graduate degree programs. Since these students are known quantities, faculty members may prefer to work with them and may be focusing recruiting activities in the local area as long as adequate numbers are maintained to guarantee program viability. Concentrating recruiting efforts to a local area can result in decreasing the proportion of graduate students from diverse undergraduate backgrounds. Surveys assessing student characteristics and attitudes indicate that there are no significant attitudinal or mental flexibility differences between students who continue their graduate education at the same institution and those who matriculate elsewhere. (CJ)

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Mental Flexibility and Underlying Personality Predispositions
of Graduate Students in Education

by

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Abstract of
Mental Flexibility and Underlying Personality Predispositions
of Graduate Students in Education

The ultimate goal of this study was to increase graduate faculty sensitivity regarding the value of the heterogeneity of its graduate students and to dispel any inherent anxieties which may exist regarding the perceived threatening nature of graduate students who may have received their undergraduate training from other institutions.

It was hypothesized that no significant attitudinal or mental flexibility differences exist between graduate students who received all of their undergraduate and graduate training from the same institution when compared to those who received their undergraduate and graduate training from different institutions. It was further hypothesized that no significant differences exist when mean scores of groups of graduate students categorized by institutional type and academic discipline are compared to the hypothetical "neutral" score resulting from neutral responses to each item on the California F Scale and Gough-Sanford Rigidity Scale.

The California F Scale and the Gough-Sanford Rigidity Scale were administered to 198 graduate students enrolled in a required Introduction to Research course during a three-year period and data were categorized by academic discipline and institutional type; i.e., graduate students who received the baccalaureate degree from the same institution at which they were currently enrolled; from another in-state publicly-supported institution; from an in-state private institution; from an out-of-state publicly-supported institution; and from an out-of-state private institution.

Pearson correlation and two-sample t-test matrices were constructed for each instrument and significance at the $p < .05$, $p < .01$, and $p < .001$ levels was noted.

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Introduction

During a recent study that was designed to determine the effectiveness of an institution's master's degree in education programs, an unexpected variable emerged. The number and proportion of the institution's own undergraduate degree recipients being served by its graduate programs drew attention to the possibility that a high degree of provinciality might exist within certain programs.

Of eight graduate degree programs assessed over a five-year period it was found that 61 percent of all master's degree recipients had been awarded a baccalaureate degree from the institution in question. In addition, the percentages of specific programs ranged from 42 percent to 80 percent.

It was assumed that the graduate faculty of the programs in question would be more likely to respond to evidence that unequivocally displayed the inherent liabilities related to program provinciality, especially from a marketing perspective. For, those graduate programs that continue to rely heavily upon the institution's own undergraduate degree recipients, in light of declining enrollments and changing career emphases, may find it difficult to maintain adequate numbers to support themselves. More important is the possible developmental effect graduate students from diverse undergraduate institutions may have upon an institution's graduate faculty members.

The ultimate goal of this study was to increase faculty sensitivity to the notion that the likelihood of infusion of new perspectives into an institution's curricular programs may be related to the level of heterogeneity of its clientele. It was felt that the findings might serve as a stimulus to each graduate program to undertake a recruiting campaign of

greater scope and, quite possibly, to recruit students of higher quality.

Consequently, it was hypothesized that no significant attitudinal or mental flexibility differences exist between graduate students who received all of their undergraduate and graduate preparation from the same institution when compared to those who received their undergraduate and graduate training from different institutions. It was further hypothesized that no significant differences exist when mean scores of groups of graduate students categorized by institutional type and academic discipline are compared to the hypothetical "neutral" score resulting from neutral responses to each item on the California F Scale and Gough-Sanford Rigidity Scale.

Procedures

During a three-year period, master's degree in education students enrolled in a required course entitled Introduction to Research were asked to complete a three part questionnaire that elicited background/program information, and responses to the California F Scale and the Gough-Sanford Rigidity Scale (Flexibility Scale of the California Psychological Inventory). A total of 198 useable responses were obtained which represented more than 90 percent of the students enrolled in the course during that period. Data were categorized by academic discipline and institutional type; i.e., graduate students who received the baccalaureate degree from the same institution at which they were currently enrolled (the particular publicly-supported institution in question); from another in-state publicly-supported institution; from an in-state private institution; from an out-of-state publicly-supported institution; and from an out-of-state private institution.

Pearson correlation and two-sample t-test matrices of mean scores were constructed for each instrument (including the appropriate concomitant sub-scales of the California F Scale) and significance at the $p < .05$, $p < .01$, and $p < .001$ levels was noted.

Instruments

The California F Scale was originally designed to be used as an indirect measure of prejudice without mentioning the names of any specific minority group and also as a measure of underlying personality predispositions (Rokeach, p. 12). It is a collection of items, each of which is highly correlated with the Anti-Semitism and Ethnocentrism Scales, and is composed of clinical material "where, in subjects' discussions on such topics as self, family, sex, interpersonal relations, moral and personal values, there had appeared numerous trends which, it appeared, might be connected with prejudice." (Adorno, p. 222)

Through wide usage it was found that the instrument measured general tendencies which led to the formulation of enduring psychological dispositions in the person; i.e., stereotyping, conventionalism, concern with power, etc. (Adorno, p. 223)

. . . a number of such variables were derived and defined, and they, taken together made up the basic content of the F scale. Each was regarded as a more or less central trend in the person which, in accordance with some dynamic process, expressed itself on the surface in ethnocentrism as well as in diverse psychologically related opinions and attitudes. These variables are listed below, together with a brief definition of each.

- a) Conventionalism. Rigid adherence to traditional, middle-class values.
- b) Authoritarian submission. Submissive, uncritical attitude toward idealized moral authorities of the ingroup.
- c) Authoritarian aggression. Tendency to be on the lookout for, and to condemn, reject, and punish people who violate conventional order.
- d) Anti-intraception. Opposition to the subjective, the imaginative, the tender-minded.
- e) Superstition and stereotypy. The belief in mystical determinants of the individual's fate; the disposition to think in rigid categories.
- f) Power and "toughness." Preoccupation with the dominance-submission, strong-weak, leader-follower dimension, identification with power figures; overemphasis upon the conventionalized attitudes of the ego; exaggerated assertion of strength and toughness.
- g) Destructiveness and Cynicism. Generalized hostility, vilification of the human.

- h) Projectivity. The disposition to believe that wild and dangerous things go on in the world; the projection outwards of unconscious emotional impulses.
- i) Sex. Exaggerated concern with sexual "goings on." (Adorno, p. 228)

Although the F-Scale was originally designed as an indirect measure of prejudice and anti-democratic tendencies at the personal level, favorable correlates have also been widely achieved with such instruments as the Politico-Economic Conservatism (PEC) Scale, the Thematic Apperception Tests (TAT) and the Rokeach Dogmatism and Opinionation Scales, in addition to the Anti-Semitism and Ethnocentrism Scales (Adorno, pp. 222-228), the Tolerance (To) Scale of the California Psychological Inventory and the Minnesota Multiphasic Personality Inventory (MMPI) (Megargee, p. 68; Gough, p. 13).

The Gough-Sanford Rigidity Scale, now identified as the Flexibility Scale of the California Psychological Inventory, was originally designed to identify people who are flexible, adaptable, and somewhat changeable in their thinking, behavior, and temperament and significant correlations through wide usage have been obtained with the Ethnocentrism Scale (from $r = .34$ to $r = .46$) and with the California F Scale (from $r = .21$ to $r = .64$) (Megargee, p. 89).

Studies indicate that while low scores on the Gough-Sanford Rigidity Scale reflect rigidity, there is little support for the notion that high scorers are flexible. Some findings, however, have been obtained which relate high scores on the Scale to high levels of creativity. Mixed evidence also appears to indicate that the results of the Scale are curvilinear and this perspective should be maintained in the interpretation of the data (Megargee, p. 90).

Findings

California F Scale mean scores of groups of students who had graduated

from each of the institutional types under observation were compared using Pearson correlation techniques and statistically significant results ($p < .01$) were obtained for all comparisons ($r = .83$ to $r = .93$, $df = 28$). When two-sample t-tests were performed using the mean scores of groups of students from each institutional type, significance ($p < .05$) was obtained only when the scores of students who graduated from out-of-state publicly-supported institutions were compared with those who graduated from out-of-state privately-supported institutions ($t = 2.28$, $df = 56$).

Significant correlations ($p < .05$ or $p < .01$) when making institutional comparisons were achieved on each of the nine subtests. Out of a total of 90 comparisons (10 per each subtest), 79 or 87.8 percent were significant with no subtest having fewer than 7 out of the 10 comparisons significant at either the $p < .05$ or $p < .01$ levels. No significance was found when two-sample t-tests were performed comparing the mean scores of the students from each institutional type on each of the nine subtests.

When F-Scale mean scores of students were compared to the hypothetical "neutral" mean score of 87, significant differences were obtained for all institutional types and all disciplines.

Gough-Sanford Rigidity Scale mean scores of groups of students who had graduated from each of the institutional types were also compared using Pearson correlation techniques and statistically significant results ($p < .01$) were obtained for all comparisons ($r = .82$ to $r = .93$, $df = 21$). When two-sample t-tests were performed using the mean scores of groups of students from each institutional type, no significance was obtained ($p < .05$ level with 42 degrees of freedom).

When Gough-Sanford Rigidity Scale mean scores of students were categorized by institutional type and were compared to the hypothetical "neutral" mean score of 66, no significant differences were obtained. When data were cate-

gorized by academic discipline, only the mean scores of graduate students enrolled in the School Administration program reflected a significant ($p < .05$) departure from the "neutral" mean score.

Discussion

High levels of correlation on the Gough-Sanford Rigidity Scale and the F-Scale total and subtest scores; one significant t-test out of ten comparisons of F-Scale totals; no significant t-tests out of 90 comparisons on F-Scale subtests; and no significant t-tests of the ten comparisons on the Gough-Sanford Rigidity Scale indicate that graduate students enrolled at the institution in question are remarkably similar when previously listed attitudinal characteristics and levels of mental flexibility are considered regardless of undergraduate institutional type or location.

The one significant t-test ($p < .05$) out of the ten comparisons of F-Scale totals occurred when the extremes of the range of mean scores were compared; i.e. when the scores of graduates of publicly-supported out-of-state institutions ($\bar{x} = 80.2$) were compared with those of graduates of privately-supported out-of-state institutions ($\bar{x} = 74.2$). This incident requires further investigation.

As shown in Appendix A, all mean scores of groups of students from the various institutional types were significantly below the "neutral" score of 87 on the California F-Scale. In addition, when mean scores of groups of students were categorized by discipline, F-Scale scores ranged from 72.3 to 87, also significantly below the "neutral" score. These two-sample t-test results can be subjectively interpreted by referring to the adjectives listed in Appendix A.

As shown in Appendix B, all mean scores of students from the various institutional types and disciplines, with the exception of School Administration, clustered closely around the "neutral" score of 66 on the Gough-Sanford

Scale. These comparisons can be subjectively interpreted by referring to the adjectives listed in Appendix B.

On the basis of the mean scores of graduate students on the California F-Scale and the Gough-Sanford Rigidity Scale, the hypothesis that no significant attitudinal or mental flexibility differences exist between students who received all of their undergraduate and graduate preparation from the same institution when compared to those who attended different undergraduate and graduate schools is accepted.

Further, the hypothesis that no significant differences exist when F-Scale mean scores of groups of graduate students categorized by institutional type and academic discipline are compared to the hypothetical "neutral" score of 87 is rejected. Also, the hypothesis that no significant differences exist when Gough-Sanford Rigidity Scale mean scores of groups of graduate students categorized by institutional type and academic discipline are compared to the hypothetical "neutral" score of 66 is accepted with the exception of that portion of the hypothesis referring to students enrolled in the School Administration program.

Conclusion

It has been the perception of this writer that graduate faculties are very receptive to the idea of their own talented undergraduates choosing to matriculate in the same institution's graduate degree programs. Since these students are known quantities faculty members may be pre-disposed to preferring to work with them and may be inadvertently focusing recruiting efforts locally as long as adequate numbers are maintained to guarantee program viability. If, over extended periods of time, graduate faculties become overly dependent upon their own undergraduates, anxiety may be unconsciously ascribed to recruiting campaigns which are designed to significantly increase the proportion of graduate students from diverse undergraduate backgrounds.

This, it is felt, can result not only in declining enrollments but, more importantly, in an insidious form of program provinciality which appears to develop in the absence of "appropriate" levels of student heterogeneity.

The results of this study appear to provide a basis from which to dispel some anxieties which may be inherent to graduate faculties. For, aside from the curricular content of students' undergraduate preparation, the knowledge that no significant attitudinal or mental flexibility differences exist between different groups may serve to remove a psychological barrier to more comprehensive recruiting thereby possibly improving program quality and fostering faculty development.

REFERENCES

- Adorno, T. W., et. al. The Authoritarian Personality. New York: Harper and Brothers, 1950.
- Gough, Harrison G. An Interpreter's Syllabus, California Psychological Inventory. Palo Alto, California: Consulting Psychologists Press, n.d.
- Megargee, Edwin I. The California Psychological Inventory Handbook. San Francisco: Jossey-Bass, 1972.
- Rokeach, Milton. The Open and Closed Mind. New York: Basic Books, 1960.

BIBLIOGRAPHY

- Furgeson, G. A. Statistical Analysis in Psychology and Education (2nd edition). New York: McGraw-Hill, 1960.
- Rokeach, Milton. The Three Christs of Ypsilanti, A Psychological Study. New York: Alfred A. Knopf, 1964.
- Rokeach, Milton. Beliefs, Attitudes, and Values. San Francisco: Jossey-Bass, 1968.
- Rokeach, Milton. The Nature of Human Values. New York: The Free Press - Macmillan, 1973.

APPENDIX A

CALIFORNIA F SCALE

Paw Score	=	145	-	116	-	87	-	58	-	29
		↓				↓				↓
		highest poss. score				neutral score				lowest poss. score
		↓				↓				
Adjectives (Men) (CPI-To)		affected cold egotistical fussy hard-hearted self-centered shallow thankless whiny fault-finding								forgiving generous good-natured independent informal pleasant reasonable soft-hearted thoughtful unselfish
Adjectives (Women) (CPI-To)		arrogant autocratic bitter defensive distrustful hard-headed infantile resentful restless sarcastic								calm efficient insightful leisurely logical mature responsible self-controlled tactful understanding

California F Scale

Mean Scores of Graduate Students

Graduates of the local institution	= 78.7**
Graduates of other Nebraska Public Colleges	= 75.4***
Graduates of other Nebraska Private Colleges	= 75.3***
Graduates of Out-of-State Public Colleges	= 80.2*
Graduates of Out-of-State Private Colleges	= 74.2***

Mean Scores of Graduate Students by Discipline

Business	= 82*	Industrial Education	= 80.5*
Counselor Education	= 73.3***	Physical Education	= 81.3*
Elementary Education	= 76.1***	School Administration	= 80.5*
English	= 72.3***	Undeclared	= 83.3
History	= 74.2***		

* p .05
 ** p .01
 *** p .001

} when compared to mean "neutral" score of 87, df = 56

APPENDIX B

GOUGH-SANFORD RIGIDITY SCALE

Raw Score	=	110	-	88	-	66	-	44	-	22
		↓				↓				↓
		highest poss. score				neutral score				lowest poss. score
		↓				↓				↓
Adjectives (Men)		easy going								determined
(CPI-Fx)		fickle								efficient
		independent								hard-headed
		lazy								organized
		optimistic								planful
		pleasure-seeking								practical
		quick								stern
		sharp-witted								stubborn
		spend thrift								stoic
		spontaneous								thorough
Adjectives (Women)		careless								cautious
(CPI-Fx)		clever								conscientious
		imaginative								conservative
		individualistic								defensive
		ingenious								prudish
		mischievous								rigid
		original								slow
		pleasure-seeking								simple
		sociable								sincere
										self-punishing

Gough-Sanford Rigidity Scale

Mean Scores of Graduate Students*

Graduates of the local institution	= 70.4
Graduates of other Nebraska Public Colleges	= 63.4
Graduates of other Nebraska Private Colleges	= 68.6
Graduates of Out-of-State Public Colleges	= 69.2
Graduates of Out-of-State Private Colleges	= 68.6

Mean Scores of Graduate Students by Discipline

Business	= 70.9	Industrial Education	= 66.8
Counselor Education	= 66.3	Physical Education	= 71.1
Elementary Education	= 71.0	School Administration	= 72.1**
English	= 68.6	Undeclared	= 69.7
History	= 71.6		

* None significant when compared to "neutral" score of 66, df = 42.

** $p < .05$ when compared to "neutral" score of 66, df = 42.